

37. Henry Co., Indiana. R. Walton Collec. No. 58240.
 38. Miami, Florida. S. N. Rhoads. No. 58253.
 39. Des Moines, Iowa. T. Van Hying. No. 79641.
 40. Jasper Co., Missouri. M. A. Mitchell. No. 58254.
 41. Silver Lake, Kansas. J. B. Quintard. No. 58246.

Bifidaria tappaniana (Ad.).

42. School Lane, Germantown, Philadelphia, Pa. R. Walton. No. 58250.
 43. West Fairmount Park, near Chamounix, Philadelphia, Pa. Vanatta. No. 58224.
 44. Buckfield, Maine. John A. Allen. No. 58219.
 45. Ithaca, New York. No. 62486.
 46-48. Upper Red Hook, Dutchess Co., New York. W. S. Teator. No. 58218.
 49-52. Washington, D. C. E. Lehnert. A. N. S., No. 58225.
 53. Drift of Oak Creek, Page's Ranch, Oak Creek, Arizona. E. H. Ashman. No. 82925.

DREDGING IN FRENCHMAN'S BAY, MAINE.

BY DWIGHT BLANEY.

Professor Edward Forbes has said, in speaking of the underwater world, "The difficulties which attend the inquiry add to the zest of the research; and there is a charm in travelling mentally over the hills and valleys buried inaccessibly beneath their thick atmosphere of brine."

There are other pleasures, however, associated with what we call the "adventure" of dredging—as dredging for shells, like many another adventure is full of surprises—and suggests untold possibilities in the way of new discoveries. One never knows what treasures will be in the next haul, and the most discouraging day still leaves us with enthusiasm for the next trip. We indeed believe that it matters little how poor a haul may be: each trip always yields us something of interest. Any day we may come upon a colony of some species we have looked upon as rare—and the next haul the dredge may disclose fine live specimens of species previously found dead.

For several seasons the *Mesalia erosa*, (Couth.) was represented in our collection by a single dead and much eroded specimen, until one lucky day we came upon a colony of them, fine large live ones. The shells were quite crimson in color, and the animals so tenacious

of life as to live for days in salt water, giving us good opportunity to make drawings of them under the microscope.

Another shell which we had looked upon as rare, and whose sculptured whorls we had always admired, is the *Scala grænlandica* (Perry). Last summer we found it in comparative abundance in one locality. Our boat being out of repair, we made a number of hauls from the ledges, well out toward the sea. One of us would take the dredge out about one hundred yards from shore and drop it, while the others on the rocks would laboriously pull it in. The haul thus radiating from one spot would cover quite an area, varying of course in depth. On this bottom, composed of quantities of fragments of barnacles scraped from the ledges by the ice in previous winters, we found a number of interesting northern species, among which was the *Scala* above mentioned. The barnacle fragments formed a most excellent protective background for this species, and it required sharp eyes to pick them out after the material had been washed over.

Associated with the *Scala* was the *Menestho striatula* (Couth.), which was equally hard to pick out from among the broken shells. As many as thirty specimens of *Scala* would be found in each haul of the dredge, and the *Menestho* proved to be also common here.

Here we also found the *Belabicarinata* (Couth.) and a great many of the *Cylichna alba* (Brown).

One of the unexpected surprises occurred one day, when in making a haul in deep water, our precious dredge caught in some obstacle which came to the surface with great reluctance. It proved to be a "gang" of lobster traps, which had been carried off into deep water and so lost. It was duly recognized and claimed by one of our men, who had lost it the previous winter. On the stones with which each trap was weighted, we found many specimens of *Chitons*; the *Trachydermon ruber* (Linne), the *T. albus* (Linne), and a few *Tonicella marmorea* (Fabr.), also a number of *Lepeta caeca* (Müller). It is interesting to note, in relation to the last species, that Gould in his "Invertebrata of Massachusetts," 1st edition, 1841, says: "Only three specimens of this shell are yet known." This is repeated in the edition of 1870. We have found it, however, fairly common.

Another surprise in our dredging was to come upon the "Dumping Ground" of the Bar Harbor Refuse Scow. On this spot Bar Harbor has deposited its refuse for some years. The lighter material being carried out by the tide and the heavier sinking to the bottom

to become encrusted with the red nullipore—*Lithothamnion polymorphum*—broken bottles, bones, broken china, and similar refuse forming good hiding-places for many shells. The *Chitons* mentioned above, and the *Solariella obscura* (Couth.), also the pretty *Margarites grænlandica* (Gmelin) and the *Margarites cinerea* (Couth.) are found at this spot. The past year has seen a renewal of the industry of dredging the great scallops *Pecten magellanicus* (Gmelin). Many natives have fitted good-sized sailboats with power, and with power-dories and large, chain-meshed dredges have given the bottom of the Bay a good scraping. This industry has paid well for a while, but the increasing number of boats devoted to this work is beginning to tell on the supply, and it is bound to give out shortly.

SHELLS OF GRANT, VALENCIA CO., NEW MEXICO.

BY H. A. PILSBRY.

During a brief stop at this place, which is on the Santa Fé Pacific R. R., near the western boundary of New Mexico, above the middle of the Territory, Messrs. Albert and Joshua Baily, Jr., of this city, collected a series of shells, including several forms of considerable interest. The specimens of *Lymnæa bulimoides* are a very globose and short-spined variety, which I have before received from Prof. Cockerell and others. It will be described as var. *cockerelli* in a paper on Southwestern Mollusca now about to be published.

Valvata humeralis is a Mexican species, new to the fauna of the United States, and its occurrence so far north of the Mexican boundary leads us to expect it in suitable places over a considerable territory within our limits. It is quite unlike *V. virens* of the Rocky Mountain region, having more in common with the northern *V. sin-cera* Say. The list follows :

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| <i>Zonitoides arborea</i> (Say). | <i>Bifidaria pellucida hordeacella</i> |
| <i>Z. minuscula</i> (Binn.). | (Pils.). |
| <i>Pyramidula striatella</i> (Anth.). | <i>Vertigo ovata</i> (Say). |
| <i>Helicodiscus parallelus</i> (Say). | <i>V. coloradoensis arizonensis</i> |
| <i>Vallonia gracilicosta</i> (Reinh.). | (Pils. & Van.). |
| <i>V. cyclophorella</i> (Anc.). | <i>Cochlicopa lubrica</i> (Müll.). |
| <i>Pupoides marginatus</i> (Say). | <i>Succinea grosvenori</i> (Lea). |
| <i>P. hordaceus</i> (Gabb.). | <i>Lymnæa bulimoides cockerelli</i> |
| <i>Pupilla muscorum</i> (L.). | (Pils.). |
| <i>P. blandi</i> (Morse). | <i>Planorbis parvus</i> (Say). |
| <i>P. syngenes dextroversa</i> (Pils. | <i>Physa</i> sp. undet., not adult. |
| & Van.). | <i>Valvata humeralis</i> (Say). |